

CLASS RK1 – LLNRK • LLSRK • LLSRK_ID SERIES FUSES

POWR-PRO® 250/600 Vac • Dual Element • Time-Delay • 1/10–600 A

QPL  

1

UL Class RK1 Fuses



Description

RK1 fuses are extremely current-limiting fuses meaning they greatly reduce or eliminate damage to circuits and equipment under short-circuit conditions. Replacing existing Class H, K and RK5 fuses with RK1 fuses is one of the easiest ways to immediately improve the protection of plant workers and equipment.

Applications

- All general purpose circuits
- Motors
- Transformers
- Safety upgrades

Features/Benefits

- POWR-PRO Performance
- Indication available
- Dual-element design
- Extremely Current-Limiting
- IEC Type 2 “No Damage” protection to IEC and NEMA type motor starters
- Indicating and DIN mount fuse holders available

Specifications

Voltage Ratings

600 Vac/300 Vdc (LLSRK/LLSRK_ID)
250 Vac/125 Vdc (LLNRK)

Interrupting Ratings

AC: 200 kA rms symmetrical
300 kA rms symmetrical
(Littelfuse self-certified)

Ampere Range Approvals

DC: 20 kA
1/10 – 600 A
AC: Standard 248-12, Class RK1
UL Listed (File: E81895)
CSA Certified (File: LR29862)
DC: Littelfuse self-certified
Federal Specification WF-1814
(QPL- W-F-1814)

Recommended Fuse Holders

LFR60 Series • LFR25 Series 94

Ordering Information

AMPERE RATINGS						
1/10	1	2 9/10	6 1/4	25	80	250
15/100	1 1/8	3	7	30	90	300
2/10	1 1/4	3 2/10	8	35	100	350
1/4*	1 4/10	3 1/2	9	40	110	400
3/10	1 6/10	4	10	45	125	450
4/10	1 8/10	4 1/2	12	50	150	500
1/2	2	5	15	60	175	600
6/10	2 1/4	5 9/10	17 1/2	70	200	
8/10	2 1/2	6	20	75*	225	

Note: All LLSRK_ID fuses rated 1 amp and above are Indicator® fuses.

*Ampere rating only available for the 600 V.

600 V

TYPE	SERIES	AMP	CATALOG NUMBER	ORDERING NUMBER
INDICATING	LLSRK_ID	60	LLSRK060ID	LSRK060.TXID
NON-INDICATING	LLSRK	60	LLSRK060	LSRK060.T

250 V

TYPE	SERIES	AMP	CATALOG NUMBER	ORDERING NUMBER
NON-INDICATING	LLNRK	80	LLNRK080	LNKR080.V

Web Resources

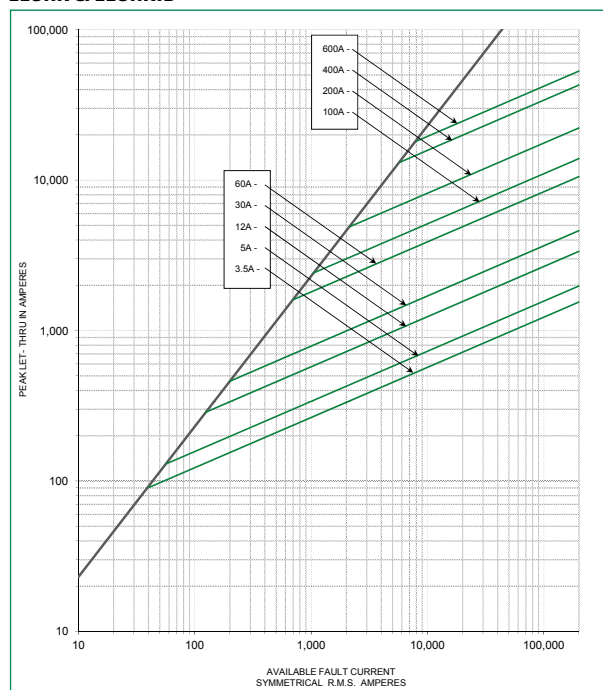
Download TC Curves, CAD drawings and other technical information: littelfuse.com/llsrk
littelfuse.com/llnrk

Dimensions

Please refer to the Class R dimensions..... 19

Peak Let-Thru Curve (600 V)

LLSRK & LLSRKID



Note: For more information, see Peak Let-Thru Table on pg. 14

CLASS RK1 – LLNRK • LLSRK • LLSRK_ID SERIES FUSES

Current-Limiting Effects of LLSRK and LLSRK_ID (600 V) Fuses

SHORT CIRCUIT CURRENT*	APPARENT RMS SYMMETRICAL CURRENT FOR VARIOUS FUSE RATINGS								
	3.5 A	5 A	12 A	30 A	60 A	100 A	200 A	400 A	600 A
5,000	196	251	427	586	1,341	1,764	2,821	-	-
10,000	247	316	538	739	1,689	2,222	3,554	6,850	8,489
15,000	283	362	616	845	1,934	2,544	4,069	7,842	9,718
20,000	312	399	677	930	2,129	2,800	4,478	8,631	10,696
25,000	336	430	730	1,002	2,293	3,016	4,824	9,297	11,522
30,000	357	456	776	1,065	2,437	3,205	5,126	9,880	12,244
35,000	376	481	816	1,121	2,565	3,374	5,397	10,401	12,889
40,000	393	502	854	1,172	2,682	3,528	5,642	10,874	13,476
50,000	423	541	919	1,263	2,889	3,800	6,078	11,714	14,516
60,000	450	575	977	1,342	3,070	4,038	6,459	12,448	15,426
80,000	495	633	1,075	1,477	3,379	4,445	7,109	13,700	16,979
100,000	533	682	1,158	1,591	3,640	4,788	7,658	14,758	18,290
150,000	610	781	1,326	1,821	4,167	5,481	8,766	16,894	20,936
200,000	671	859	1,460	2,005	4,586	6,032	9,648	18,594	23,043

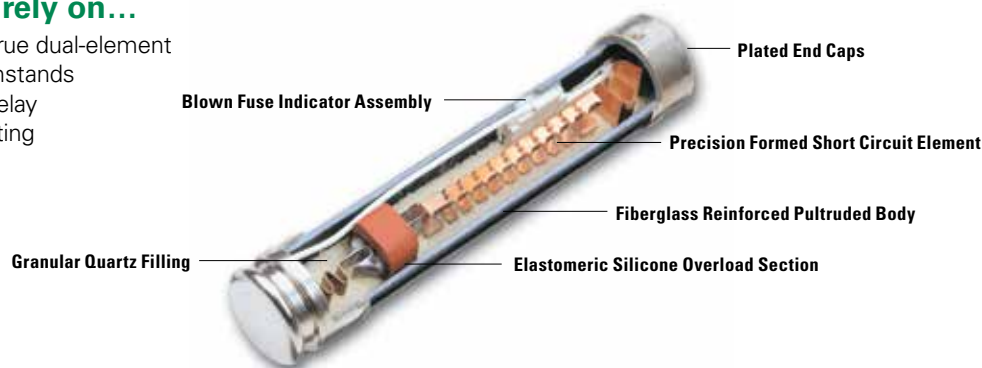
Current-Limiting Effects of LLNRK (250 V) Fuses

SHORT CIRCUIT CURRENT*	APPARENT RMS SYMMETRICAL CURRENT FOR VARIOUS FUSE RATINGS					
	30 A	60 A	100 A	200 A	400 A	600 A
5,000	900	1,400	2,000	2,700	4,800	5,000
10,000	1,100	1,900	2,700	3,500	6,200	8,500
15,000	1,250	2,100	3,100	4,200	7,000	9,500
20,000	1,400	2,400	3,500	4,600	8,000	10,800
25,000	1,500	2,600	3,900	5,000	8,300	11,500
30,000	1,600	2,800	4,000	5,250	9,000	12,000
35,000	1,700	2,850	4,300	5,500	9,500	12,500
40,000	1,800	3,000	4,600	5,800	9,800	13,500
50,000	1,900	3,200	4,800	6,300	10,200	14,000
60,000	2,000	3,500	5,200	6,700	11,000	15,000
80,000	2,200	3,900	5,700	7,200	12,200	16,000
100,000	2,300	4,000	6,000	8,100	12,700	17,000
150,000	2,500	4,500	6,700	9,100	14,000	19,000
200,000	2,600	4,800	7,000	9,700	15,000	20,000

*Prospective RMS Symmetrical Amperes Short-Circuit Current
 Note: Data derived from Peak Let-Thru Curves

LLSRK_ID Fuses—Quality Construction for performance you can rely on...

Littelfuse **LLSRK_ID** Fuses feature true dual-element construction. This robust design withstands repeated surges within rated time delay without opening needlessly, eliminating downtime caused by power surges or equipment demands.



GDB SERIES TOUCH-SAFE POWR-BLOKS

Global Distribution Blocks



Description

POWR-BLOKS Global Distribution Blocks add safety and mounting versatility to our distribution block solutions. The Global Distribution Blocks are approved to UL standards. The Global Distribution Blocks are IP20 finger safe to reduce the risk of contact and eliminate the need for block or panel covers. Installation is quick and easy, all blocks can be mounted on DIN rail or to the panel.

Features/Benefits

- Global part meeting UL standards
- Space saving design
- Integrated touch-safe cover to increase safety
- IP20 protection rating
- Mounts to DIN rail or panels
- Reliable brass connections for excellent continuity in a smaller design

Specifications

Voltage Rating	UL: 600 VAC/VDC
Ampere Rating	80 – 335 A
Material	Thermoplastic
Connector	GDBxxxx: Brass GDBAxxxx: Aluminum (Tin Plated)
Flammability Rating	UL94 V-0
Approvals	UL Recognized (File: E309688, E171395) UL Listed (File: E482231) CSA Certified (File: 700111)
Operating Temperature	-40°C to +90°C
Storage Temperature	-40°C to +100°C
Relative Humidity	50% @ 40°C, 90% @ 20°C
Environmental	RoHS compliant

Web Resources

For additional information visit [Littelfuse.com/gdb](https://www.littelfuse.com/gdb)

Electrical Specifications

CATALOG/ ORDERING NUMBER	POLES	AMPS	WIRE RANGE				OVERCURRENT PROTECTION FUSE REQUIRED							SCCR IN RMS SYM AMPS	AGENCY APPROVALS			
			LINE CONNECTION		LOAD CONNECTION										UR	cURus	UL	CSA
			LINE	OPENINGS PER POLE	OPENINGS PER POLE	LOAD	CLASS J (JTD_ID)	Class T (JLLN, JLLS)	Class RK1 (LLNRK, LLSRK, KLNr, KLSR)	Class RK5 (FLNR, FLSR, IDSR)	CLASS G (SLC)	CLASS CC (CCMR, KLDR, KLKR)						
GDB60801Z	1	80	1	#8 - #4	6	#8 - #4 #10 - #14	80	- -	- -	- -	- -	- -	100,000		•			
GDB61151Z	1	115	1	#8 - #2 #10 - #6	6	#14 - #4	125	- -	- -	- -	- -	- -	100,000		•			
GDB61153Z	3	115	1	#8 - #2	6	#14 - #4	125	-	-	-	-	-	100,000		•			
GDBAD241Z	1	115	1	#10 - #2	4	#14 - #10	125	200	100	30	60	30	65,000			•	•	
GDB61601Z	1	160	1	#8 - 2/0	6	#14 - #4	175	-	-	-	-	-	100,000	•				
GDB61753Z	3	175	1	#8 - 2/0	6	#14 - #4	175	-	-	-	-	-	100,000		•			
GDBAD451Z	1	200	1	#8 - 3/0	4	#8 - #2	225	225	200	60	60	30	100,000			•	•	
				#8 - 3/0		#14 - #8	100	110	100	30	60							
GDB63101Z	1	310	1	3/0 - 350 kcmil	11	#14 - #2 #14 - #6 #14 - #8	350	-	-	-	-	-	100,000	•				
GDBAD741Z	1	335	1	#6 - 400 kcmil #14 - 3/0	8	#14 - #2	-	-	-	-	-	-	10,000	•			•	